

LISTING OF THE CLAIMS

1. (Currently Amended) A bus system, comprising:
 - a first dynamically configurable bus;
 - a first bus device on the first bus to operate at a first power state and
having a first virtual address and a first physical address;
 - a second bus device on the first bus having a second virtual address and
a second physical address, the second bus device to experience a
configuration event without the configuration event effecting the
first power state of the first bus device;
 - a map of the first and second virtual addresses to the first and second
physical addresses, respectively, the map to be accessible over the
first bus;
 - wherein at least one of the first and second virtual addresses is a
guaranteed unique identifier.
2. (Previously Presented) The bus system of claim 1, wherein the map is to be distributed across a plurality of bus devices on the first bus.
3. (Previously Presented) The bus system of claim 12, wherein a portion of the map is stored on the bridge.
4. (Original) The bus system of claim 1, wherein at least one of the first and second bus devices is a bus manager.

5. (Previously Presented) The bus system of claim 4, wherein the bus manager is one of a workstation and a personal computer.
6. (Previously Presented) The bus system of claim 4, wherein a portion of the map is stored on the bus manager.
7. (Original) The bus system of claim 1, wherein the bus system implements a network.
8. (Previously Presented) The bus system of claim 1, wherein at least one of the first and second bus devices is one of a printer, a plotter, a workstation, a personal computer, a video camera, and a magnetic tape drive.
9. (Previously Presented) The bus system of claim 1, wherein the map is encoded as one of an array, a doubly linked list, a tree, a table, and a file.
10. (Original) The bus system of claim 1, wherein the map is bi-directional.
11. (Previously Presented) The bus system of claim 1, further comprising a second dynamically configurable bus.
12. (Original) The bus system of claim 11, wherein the first and second buses are coupled by a bridge.

13. (Currently Amended) A bus system, comprising:
- a first dynamically configurable bus;
 - a plurality of bus devices coupled to the first bus, each of the plurality of bus devices having a virtual address, and a physical address, and
a power state, at least one of the plurality of bus devices to
experience a configuration event without the configuration event
effecting the power state of the bus devices that are not to
experience the configuration event; and
 - a map of the virtual addresses of the bus devices, said map to be
accessible over the first bus;
- wherein at least one virtual address is a guaranteed unique identifier.
14. (Previously Presented) The bus system of claim 13, wherein said map is to be distributed across the plurality of bus devices.
15. (Previously Presented) The bus system of claim 23, wherein the map is to be reconstructed for bus devices on the first and second buses after detection of a configuration event on one of the first and second buses.
16. (Original) The bus system of claim 13, wherein at least one of the bus devices is a bus manager.
17. (Previously Presented) The bus system of claim 16, wherein the bus manager is one of a workstation and a personal computer.

18. (Previously Presented) The bus system of claim 16, wherein a portion of the map is stored on the bus manager.

19. (Original) The bus system of claim 13, wherein the bus system implements a network.

20. (Previously Presented) The bus system of claim 13, wherein at least one of the bus devices is one of a printer, a plotter, a workstation, a personal computer, a video camera, and a magnetic tape drive.

21. (Previously Presented) The bus system of claim 13, wherein the map is encoded as one of an array, a doubly linked list, a tree, a table, and a file.

22. (Previously Presented) The bus system of claim 13, wherein the map is bi-directional.

23. (Previously Presented) The bus system of claim 13, further comprising a second dynamically configurable bus.

24. (Original) The bus system of claim 23, wherein the first and second buses are coupled by a bridge.

25. (Previously Presented) The bus system of claim 24, wherein a portion of the map is stored on the bridge.

26. (Previously Presented) The bus system of claim 23, wherein the map is to be reconstructed for bus devices on one of the first and second buses after experiencing a configuration event.

27. (Currently Amended) A method comprising:

querying a first bus device and a second bus device other than a bus manager on a dynamically configurable bus system;

identifying the queried device from its configuration information;

ascertaining a virtual address and a physical address for the identified device;

constructing a map of the virtual address of the first and the second bus device to the physical address of the first and the second bus device, respectively, the physical address being a guaranteed unique identifier, the querying, identifying, ascertaining, and constructing being able to be performed without effecting a power state of the first bus device and the second bus device; and

storing the map, said map to be accessible over the bus system.

28. (Previously Presented) The method of claim 27, wherein the constructing the map includes encoding the map as one of an array, a doubly linked list, a tree, a table, and a file.

29. (Previously Presented) The method of claim 27, wherein the dynamically configurable bus system includes a first dynamically configurable bus and a second

dynamically configurable bus and the querying is performed for bus devices on one of the first and second dynamically configurable buses experiencing a configuration event.

30. (Previously Presented) The method of claim 27, wherein the constructing the map includes constructing a bi-directional map.

31. (Previously Presented) The method of claim 27, wherein the map is distributed across a plurality of bus devices on the bus system.

32. (Previously Presented) The method of claim 27, wherein the storing the map includes storing a portion of the map on the bus manager.

33. (Currently Amended) A method comprising:

querying a plurality of bus devices other than a bus manager on a
dynamically configurable bus system;
identifying the queried device from its configuration information;
ascertaining a virtual address and a physical address for the identified
device, the physical address being a guaranteed unique identifier;
constructing a map of the virtual address for each of the plurality of bus
devices to the physical address for each of the plurality of bus
devices, the querying, identifying, ascertaining, and
constructing being able to be performed without effecting a power
state of the first bus device and the second bus device; and
storing the map, said map to be accessible over the bus system and to be
distributed across the plurality of bus devices on the bus system.

34. (Previously Presented) The method of claim 33, wherein the querying the plurality of bus devices includes querying at least one of a printer, a plotter, a workstation, a personal computer, a video camera, and a magnetic tape drive.
35. (Previously Presented) The method of claim 33, wherein the bus manager comprises one of a workstation and a personal computer.
36. (Previously Presented) The method of claim 33, wherein the storing the map includes storing a portion of the map on the bus manager.
37. (Previously Presented) The method of claim 33, wherein the constructing the map includes encoding the map as one of an array, a doubly linked list, a tree, a table, and a file.
38. (Previously Presented) The method of claim 33, wherein the constructing the map includes constructing a bi-directional map.
39. (Previously Presented) The method of claim 33, wherein the dynamically configurable bus system includes a first dynamically configurable bus and a second dynamically configurable bus and the querying is performed for bus devices on one of a first and second dynamically configurable bus experiencing a configuration event.

40. (Currently Amended) A machine-readable medium to store that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:
- querying a plurality of bus devices other than a bus manager on a dynamically configurable bus system;
 - identifying the queried device from its configuration information;
 - ascertaining a virtual address and a physical address for the identified device, the physical address being a guaranteed unique identifier;
 - constructing a map of the virtual address for each of the plurality of bus devices to the physical address for each of the plurality of bus devices, the querying, identifying, ascertaining, and constructing being able to be performed without effecting a power state of the first bus device and the second bus device; and
 - storing the map, said map to be accessible over the bus system and to be distributed across the plurality of bus devices on the bus system.